1970 President Richard Nixon signs the National Environmental Policy Act, requiring an environmental impact statement for Act is amended, creating stringent anti-pollution laws, setting auto emissions standards, and requiring state plans to achieve

CLEAN AIR

The Breath of Life—For A Healthy America

"One can exist for days without food or water... but life without air is measured in seconds. In seconds."—Caskie Stinnet

EPA Southeast is dedicated to clean air for every man, woman and child in our region. Growth in our region has been rapid and our challenge is to work with our states, local governments and communities to ensure that a growing economy and clean air are goals in concert—not in conflict.

In 1970, the Clean Air Act (CAA) was passed to improve air quality. While emissions of pollutants such as carbon monoxide, particulates and lead have been greatly reduced, much work remains to be done to reduce air pollution in our larger cities. The 1990 CAA Amendments were passed to address our persistent air quality problems and protect human health from the harmful effects of air pollution. The Amendments also signaled a change from strictly pollution control to pollution prevention through measures such as the use of low sulfur fuels. Through these regulations, EPA Southeast has worked with our states to bring many highly populated areas into compliance with clean air standards.

EPA Southeast is working to prevent and minimize stationary—industrial—emissions. Stationary pollution is what we commonly think of when we picture billowing smokestacks. Based on our current Toxic Release Inventory (TRI), an EPA report on 600 designated air toxics, one major source of stationary emissions in the Southeast is produced by coal burning power plants. Currently, there are 89 coal burning power plants in the Southeast releasing more than 1.4 million tons of nitrous oxide, sulfur dioxides and particulates into our air each day. Nitrous oxide is a major contributor to the formation of ground-level ozone (smog), acid rain and haze. The combined effect of these emissions is the daily equivalent of six million commuter cars.

Mobile emissions from autos, boats, planes, buses and trains are another major source of air pollution in the Southeast. Today, more Americans than ever are dependent on automobiles to take them to and from work. Relocation into the suburbs and a lag in mass transit development and commuter buy-in has created longer, more environmentally costly commutes. For example, Atlantans now have an average workplace commute of 38 miles,

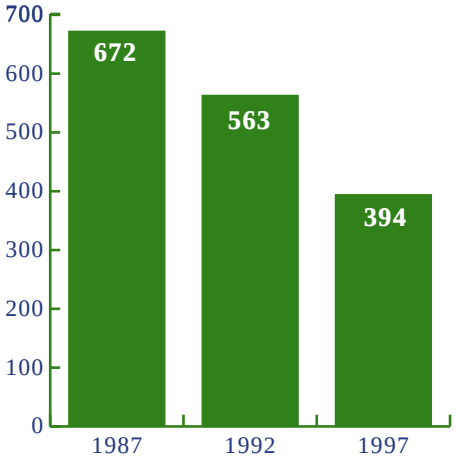
every large project approved or funded by the federal government. Twenty million people celebrate first Earth Day. The Clean Air standards. The U. S. Environmental Protection Agency is created with 5,000 employees and a $1.3 billion budget. EPA Region 4

Left half of photo demonstrates smog and reduced visibility, right half of photo demonstrates clear visibility with no smog

the longest in the country. Atlanta also reported a record breaking 70 consecutive "smog alert" days in the summer of 1999, putting it among the top ten U.S. cities with the poorest air quality. (A ***smog alert*** day is declared when outdoor air quality is so poor that it can trigger health related problems in individuals with asthma or other respiratory disorders.) Although we've made progress in the Southeast, we're now driving almost 60 percent more than in 1980, and experts fear we'll lose all our gains in reducing tailpipe emissions within the next decade.

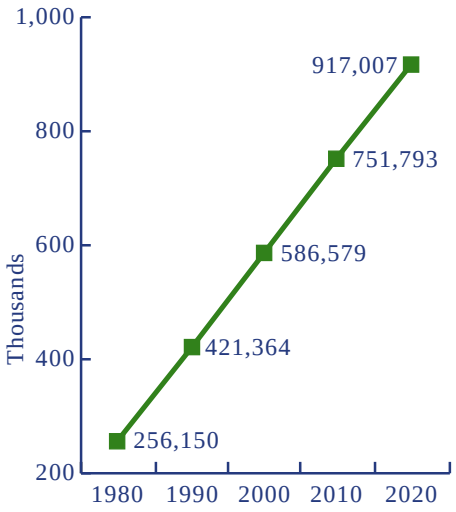
EPA Southeast continues to strive to regulate and improve our region's air quality, knowing that our health is directly impacted by the quality of the air we breathe. The Center for Disease Control (CDC) has reported that in one 15 year period, asthma rates for all Americans have increased by 75 percent. Asthma now affects more than 15 million Americans, with children being the most affected. Children under 5 years of age have suffered a 160 percent increase in asthma rates, and asthma is now the most prevalent chronic disorder for all children under the age of 17. Cancer, lung scarring and other chronic respiratory ailments can also be attributed to poor air quality.

Toxic Releases Inventory (TRI)
millions of pounds per year



is established with an office in Atlanta and a support laboratory in Athens, GA. 1971 Congress restricts lead-based paints in banned. Manufacturers required to supply toxicological information and register pesticides. Canada and the U.S. agree to clean

Vehicle Miles Traveled (VMT) per year with projection



Population growth brings new pressures—particularly increased vehicle traffic—on air quality. Despite already crowded roadways, our traffic problems are predicted to worsen

Geographically, we face a big challenge regarding air pollution in the Southeast. Wind currents and the jet stream push pollutants toward our region and prevent those created within our region from moving on. Additionally, the Appalachian Mountain Range and our moist, warm air inhibit the movement of polluted air out of our region. We are at greatest risk during our warmest months, but air pollution risks really never go away.

EPA Southeast, working with our states, will continue to implement air quality standards. With your help we can be successful in attaining clean air and better health for everyone.

Here's What You Can Do to Help Keep Our Air Clean:

- *Car pool, take mass transit, or bike to work.*
- *Work at home.*
- *Combine errands and conserve trips.*
- *If you do drive, fuel up after dark to reduce fuel evaporation at the pump.*
- *Conserve electricity whenever possible.*

Smoky Mountain Haze

Much of the phenomenon of the white or brown haze that hovers around the Smokies (hence their name) is actually manmade air pollution. The visual range of the Smokies should be around 70 miles, but because of air pollution (haze) the average visual range is only 15 to 30 miles. Haze is caused when sunlight hits tiny pollution particles in the air. Some of the light is absorbed by the particles and the light is scattered before it reaches an observer. More pollution means more light absorption, which reduces the clarity and color of what we see. This effect is particularly true during humid conditions when the air is heavy with tiny water molecules. Some haze forming pollutants are emitted directly into the air while others are formed once they enter the air and bind together. Some of the pollutants that form haze have been linked to serious health problems and environmental damage. To reduce haze, we must minimize planned burning and reduce emissions of haze-forming pollutants from vehicles, power plants and other industrial sources.

residences and bans lead paint on cribs and toys. 1972 Clean Water Act is passed reducing pollution from point sources. DDT is up the Great Lakes. Representatives of 114 countries meet in Stockholm, Sweden in first global environmental conference. 1973